



# CSR Advisory Council Update

March 28, 2022

Noni Byrnes, Ph.D.  
Director  
Center for Scientific Review

# Welcome: CSR Advisory Council Members

## Introducing our newest members!



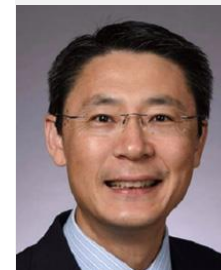
**Leopoldo Cabassa, Ph.D.**

Associate Professor  
George Warren Brown School of  
Social Work  
Washington University in St. Louis



**Matthew Carpenter, Ph.D.**

Professor  
Departments of Psychiatry and  
Behavioral Sciences  
Medical University of South Carolina



**Jinming Gao, Ph.D.**

Professor of Oncology, Pharmacology  
and Otolaryngology  
Simmons Comprehensive Cancer Center  
Department of Pharmacology  
University of Texas Southwestern  
Medical Center



**Christine Hendon, Ph.D.**

Associate Professor  
Department of Electrical Engineering  
Columbia University



**Michelle Janelins, Ph.D.**

Associate Professor  
Division of Supportive Care in Cancer  
Department of Surgery  
University of Rochester



**Tonya Palermo, Ph.D.**

Professor and Associate Director  
Center for Child Health, Behavior and  
Development  
Seattle Children's Research Institute



**Mark Peifer, Ph.D.**

Hooker Distinguished Professor  
Department of Biology  
University of North Carolina-Chapel Hill



**Narasimhan Rajaram, Ph.D.**

Associate Professor  
Department of Biomedical Engineering  
University of Arkansas at Fayetteville



**Elizabeth Villa, Ph.D.**

Associate Professor  
Section of Molecular Biology  
Division of Biological Sciences  
University of California, San Diego

# A special welcome...CSR Advisory Council Ad Hocs



**Karen Anderson, M.D., Ph.D.**

Professor  
Biodesign Institute  
School of Life Sciences  
Arizona State University  
Mayo Clinic Arizona



**Sean Davidson, Ph.D.**

Professor, Vice Chair of Research  
Department of Pathology  
and Laboratory Medicine  
University of Cincinnati



**Edda Frauke Spiekerkoetter, M.D.**

Associate Professor of Medicine  
Department of Pulmonary  
and Critical Care Medicine  
Stanford University School of Medicine



**Lynn M. Yee, MPH, M.D.**

Assistant Professor  
Division of Maternal-Fetal Medicine  
Department of Obstetrics and  
Gynecology  
Feinberg School of Medicine  
Northwestern University



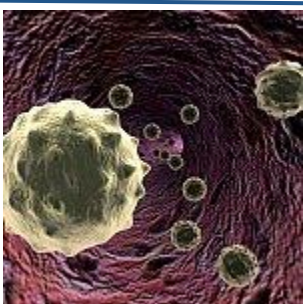
## Overview: Mission, Strategic Framework & Scope

# CSR's Mission



Center for  
Scientific Review

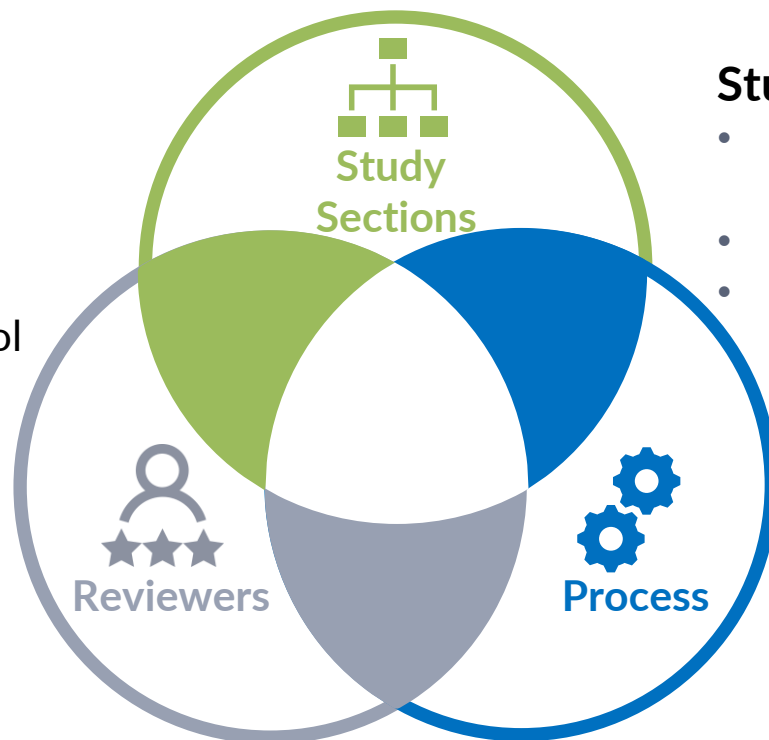
To ensure that NIH grant applications receive fair, independent, expert, and timely scientific reviews - free from inappropriate influences - so NIH can fund the most promising research.



# Strategic Framework: Quality of Peer Review

## Reviewers

- Reviewer Training
- Broaden/Diversify Reviewer Pool
- Incentivizing service
- Reviewer Evaluation



## Study Sections

- Scientific scope (relevance, adapting to emerging areas, not perpetuating stale science)
- Output (identification of meritorious science)
- Size appropriate for competition

## Process

- Confidentiality/Integrity
- Fairness/bias mitigation
- Assignment/Referral of Applications
- Review Criteria and Scoring System



Transparency



Data-driven decisions



Stakeholder engagement



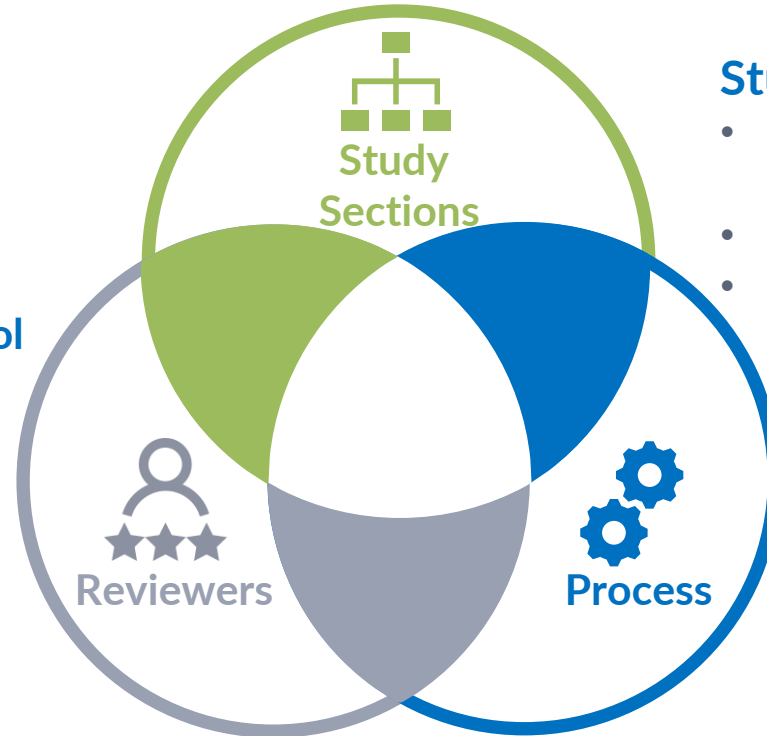
Open, multidirectional, respectful communications

# Multiple ongoing efforts in different domains

## Topics of discussion in previous CSR Advisory Council meetings

### Reviewers

- Reviewer Training
- Broaden/Diversify Reviewer Pool
- Incentivizing service
- Reviewer Evaluation



### Study Sections [ENQUIRE]

- Scientific scope (relevance, adapting to emerging areas, not perpetuating stale science)
- Output (identification of meritorious science)
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### Process

- Confidentiality/Integrity
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Transparency



Data-driven decisions



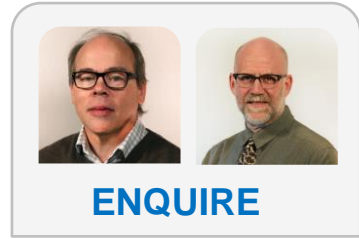
Stakeholder engagement



Open, multidirectional, respectful communications



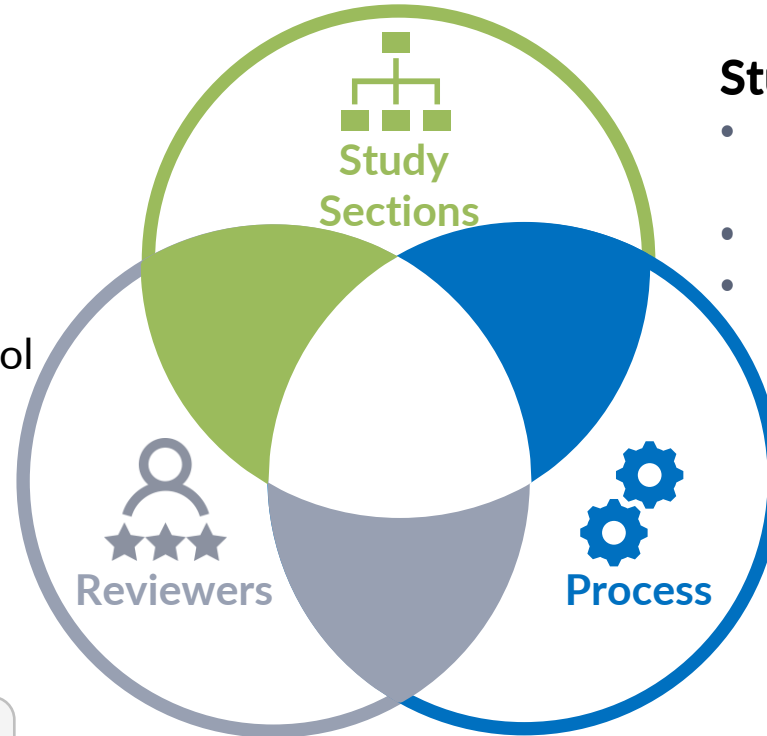
# Today's CSRAC agenda



ENQUIRE

## Reviewers

- Reviewer Training
- Broaden/Diversify Reviewer Pool
- Incentivizing service
- Reviewer Evaluation



## Study Sections

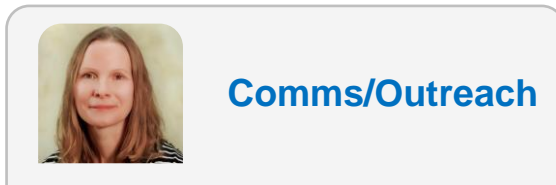
- **Scientific scope** (relevance, adapting to emerging areas, not perpetuating stale science)
- **Output** (identification of meritorious science)
- **Size appropriate for competition**

## Process

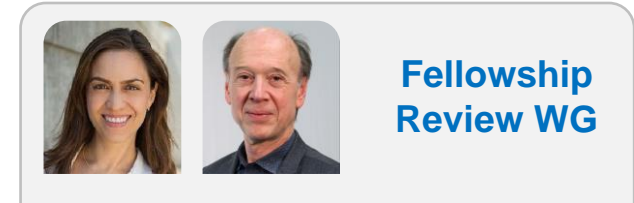
- Confidentiality/Integrity
- **Fairness/bias mitigation**
- Assignment/Referral of Applications
- **Review Criteria and Scoring System**



Bias Training



Comms/Outreach



Fellowship  
Review WG



Transparency



Data-driven decisions



Stakeholder engagement



Open, multidirectional, respectful communications



# CSR's Draft Strategic Plan



- Discussed with CSRAC last September
- Very impressed with the level of engagement across the scientific community -- many thoughtful, well-formulated comments from individuals and organizations
- Extended comment period until **April 30**
- Plans: examine all feedback, adjust the plan as necessary, publish a summary of the main feedback, and issue the final CSR Strategic Plan (late Spring 2022)

# CSR's Scope (FY 2021)

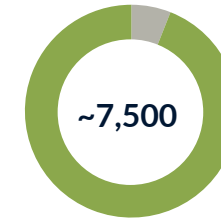
  
**~88,000**  
NIH Applications



  
**~66,000 (75%)**  
Reviewed by CSR



**92%**  
R01s



**95%**  
Small Business



**83%**  
Fellowships

**With the invaluable assistance of ~20,000 reviewers, in ~1,300 meetings**

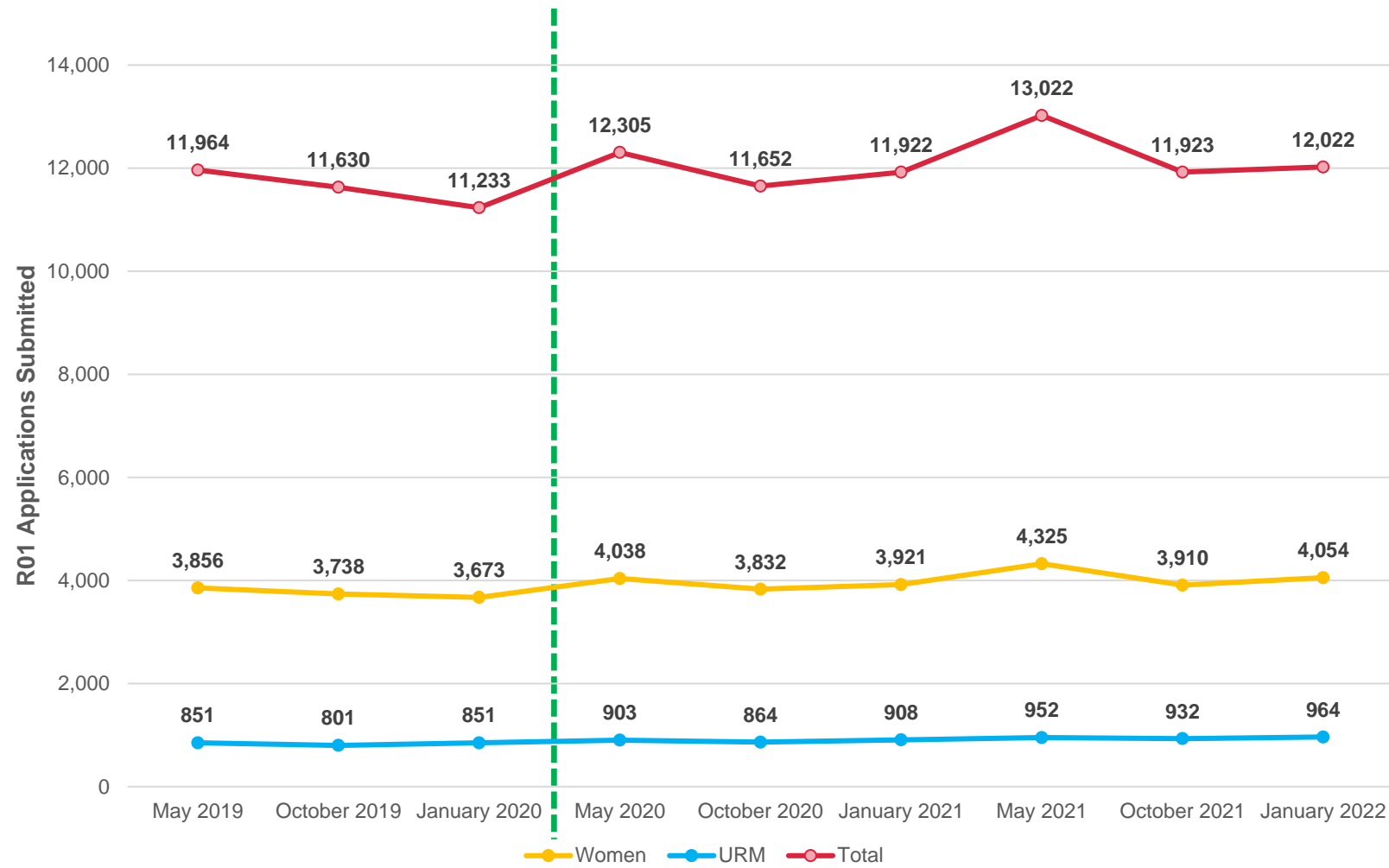
**FY21**

**182 Special Initiatives  
Reviewed by CSR**



**And many more PARs, RFAs and special reviews**

# R01 Submissions (May 2019 - January 2022)



Pre-pandemic

Post-pandemic



Center for  
Scientific Review

## CSR News & Updates

# Scientific Leadership/Management Transitions

## Retiring



**Carole Jelsema**  
Chief, Basic Neuroscience

## Senior SROs



**Jonathan Arias**



**Jessica Bellinger**



**Michael Bloom**



**Heidi Friedman**



**James Li**



**Linda MacArthur**



# Scientific Leadership/Management Transitions

## Review Branch Chiefs



**Thomas Beres**

**Health Services &  
Systems (HSS)**



**Emily Foley**

**Disease Control & Applied  
Immunology (DCAI)**



**Elia Ortenberg**

**Social & Community Influences  
across the Lifecourse (SCIL)**

## Executive Leadership



**Dipak Bhattacharyya**

**Director**

**Division of Planning,  
Analysis & Information  
Management (DPAIM)**



# CSR Office of Training & Development

(within CSR Office of the Director)



**Vanessa Boyce**  
New SRO Training Coordinator



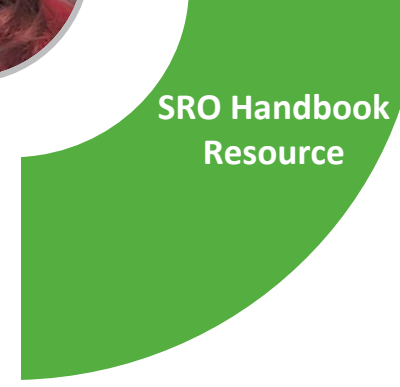
**Tanya Cohen**  
Reviewer Training Coordinator



**Natalia Komissarova**  
SRO Workshop/Continuing  
Education Coordinator



**Miriam Mintzer**  
Director



**Ben Shapero**  
SRO Handbook & Policy Coordinator

# Update: Early Career Reviewer (ECR) program

## Program rehailed in Dec 2019 (CSRAC WG: ECR Program)

- 1 → 2 ECRs/standing study section each round – doubling the number
- Developed new set of criteria to focus on junior investigators with no review experience, no R01
- Central process for application, evaluation/acceptance into program
- New database to allow tracking, evaluation



### ECR Qualifications

#### Employment

You have at least 1 year of experience as a fulltime faculty member or researcher in a similar role. Post-doctoral fellows are not eligible.

You must be an Assistant Professor or in an equivalent role. Because the program is focused on early career scientists, Associate Professors are not eligible.

#### Research

You show evidence of an active, independent research program. Examples include publications, presentations, institutional research support, patents, acting as supervisor of student projects.

You have at least 1 senior-authored research publication in a peer-reviewed journal in the last 2 years plus at least 1 additional senior-authored research publication since receiving a doctorate.

#### Grant & Review History

You have not served on an NIH study section in any capacity aside from as a mail reviewer. (Mail reviews do not include participation in the meeting.)

You have not held an R01 or R01-equivalent (R35, R37, RF1, R23, R29, DP1, DP2, DP5, U01, RL1) grant in the PD/PI role.

You must have submitted a grant proposal, in the PI/PI role, to the NIH and received the associated summary statement.

**Table 1. Diversity of Early Career Reviewers**

Meeting Dates	Female	URM	Black or African American	Hispanic	# of ECRs
Feb/Mar 2020	49.6%	14.4%	5.2%	7.3%	383
Feb/Mar 2021	50.4%	18.5%	7.1%	9.9%	395
Feb/Mar 2022	54.8%	16.4%	5.8%	9.0%	378

**Table 2. Outcomes for ECRs 2012-2020**

Successfully competed for R01 or equivalent*	46.2%
Serve as standing members	14.1%

**Targeted outreach efforts and further analyses are ongoing**

# Update: Simplifying Review Criteria Recommendations

## Non-CT WG

### CSR Advisory Council Members



Jinming Gao, Ph.D.,  
UT Southwestern  
Medical Center



Alfred George, M.D.,  
Northwestern  
University



Yasmin Hurd, Ph.D.,  
Mount Sinai School of  
Medicine



Deanna Kroetz, Ph.D.,  
University of  
California, San  
Francisco



José López, M.D.,  
Bloodworks  
Northwest Research  
Institute



Tonya Palermo, Ph.D.,  
University of Washington  
**Co-chair**

### Working Group Ad Hocs



Kevin Corbett, Ph.D.,  
University of  
California, San Diego



Michelle Janelins,  
Ph.D.,  
University of  
Rochester Medical  
Center



Brooks King-Casas,  
Virginia Tech Uni

### NIH Staff



Sally Amero, Ph.D.,  
Office of Extramural  
Research



Bruce Reed, Ph.D.,  
**Co-Chair**

## CT WG

### CSR Advisory Council Members



Alfred George, M.D.,  
Northwestern  
University



Yasmin Hurd, Ph.D.,  
Mount Sinai School of  
Medicine



Tonya Palermo, Ph.D.,  
University of Washington  
**Co-chair**

### Working Group Ad Hocs



Brian Boyd, Ph.D.,  
University of Kansas



Matthew Carpenter,  
Ph.D.,  
Medical University of  
South Carolina



Michelle Janelins,  
Ph.D.,  
University of  
Rochester Medical  
Center



Brooks King-Casas,  
Ph.D.,  
Virginia Tech  
University



Pamela Munster, Ph.D.,  
University of California San Francisco



NIH Staff



Sally Amero, Ph.D.,  
Office of Extramural  
Research



Bruce Reed, Ph.D.,  
**Co-Chair**

CSR AC

NIH

**DEC 2019 – MAR 2020** - CSR AC Working Group 1 (Non-CT) – input via blogs (Review Matters, Open Mike)

**MAR 2020** - Interim report presented to full CSR Advisory Council

**SEPT 2020 – FEB 2021** - CSR AC Working Group 2 (CT)

**MAR 2021** - Final recommendations (WG1 and 2) approved by full CSR Advisory Council

**JULY 2021** - Concept approved by NIH senior leadership committee on extramural activities – recommended formation of working group for further consideration

**OCT 2021 – FEB 2022** - NIH Working Group 1 (non-CT) developed recommendations

**FEB 2022** – NIH Working Group 1 (non-CT) recommendations approved by senior leadership committee on extramural activities.

**APRIL 2022** – Presentation of (non-CT) recommendations to NIH Steering Committee

# Reminder: Reporting Bias in Review to CSR



**G.Fosu\_AssocDir@csr.nih.gov**

- Included in signature of all CSR staff on outgoing emails
- Every allegation is carefully investigated by CSR senior management (Dr. Fosu and Scientific Division Director)
- If we agree re: biased/flawed review – CSR will re-review application in same council round. If we don't agree, the official NIH appeals process remains available to all investigators.
- Follow-up with reviewer and actions, as necessary, by CSR Scientific Division Director → culture change



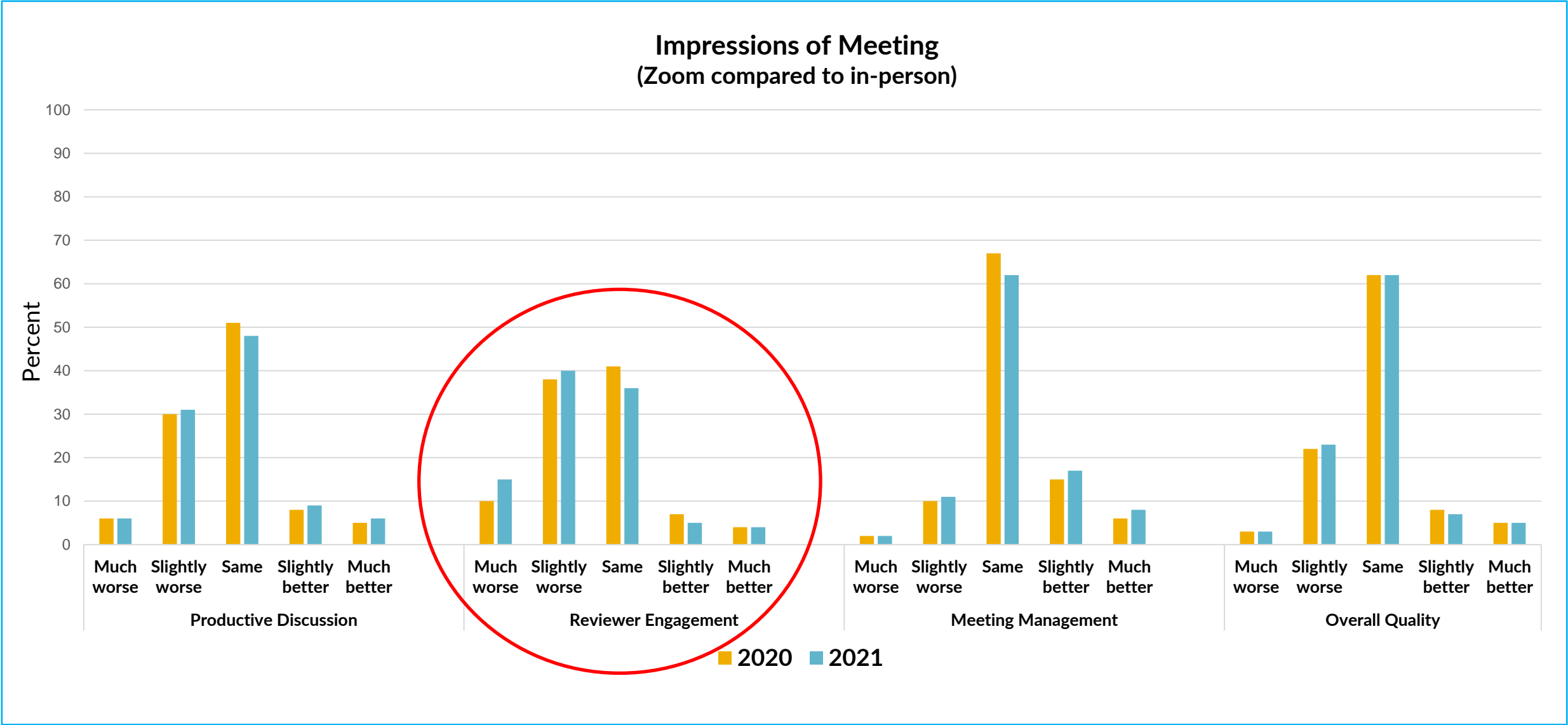
**Gabriel Fosu, Ph.D.**

**CSR Associate Director for  
Diversity and Workforce  
Development**

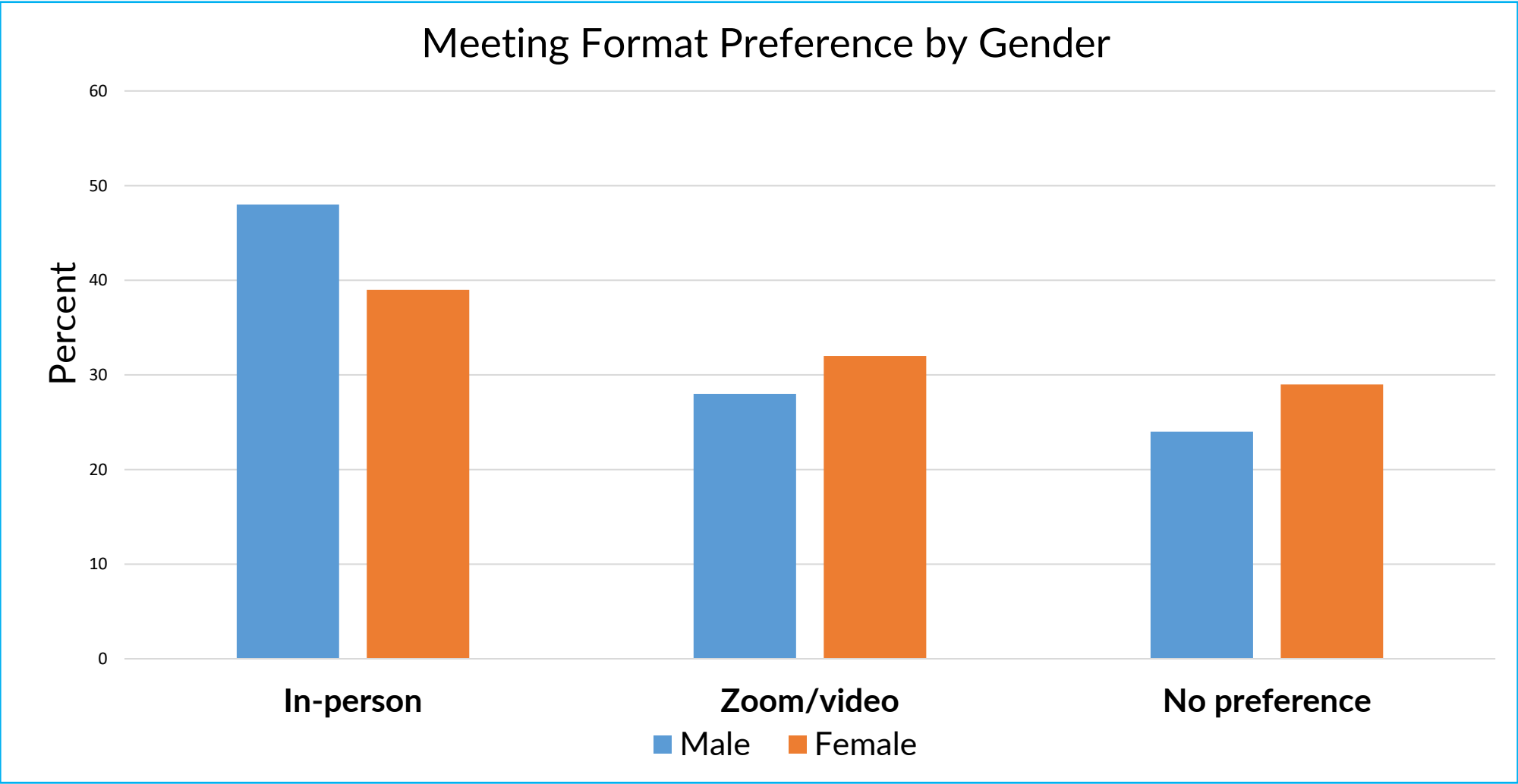


## Future of CSR Peer Review Meetings

# CSR Reviewer Surveys: Overall quality of review ok in Zoom, but reviewer engagement suffers

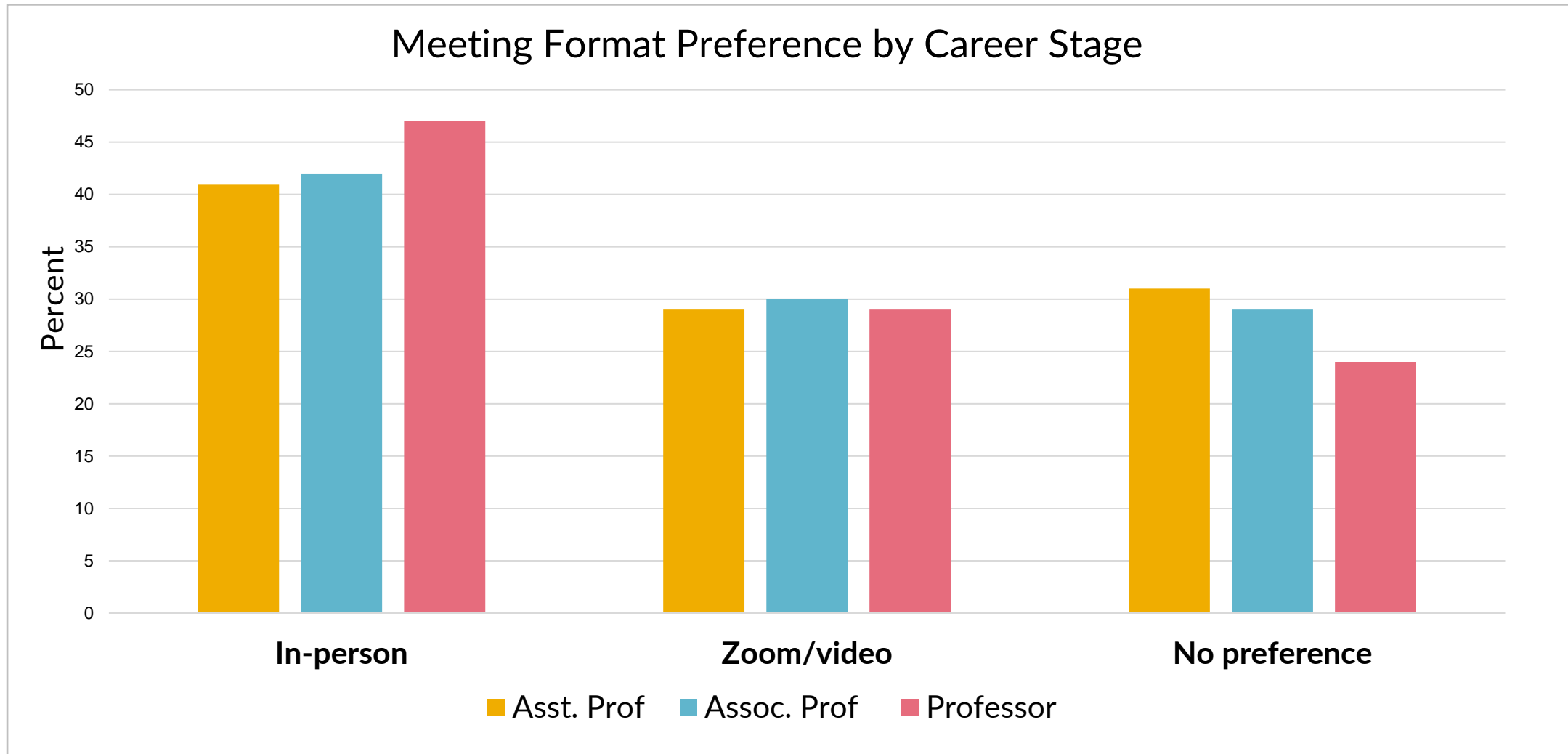


# Both men and women prefer in-person over Zoom, but margin is larger for men



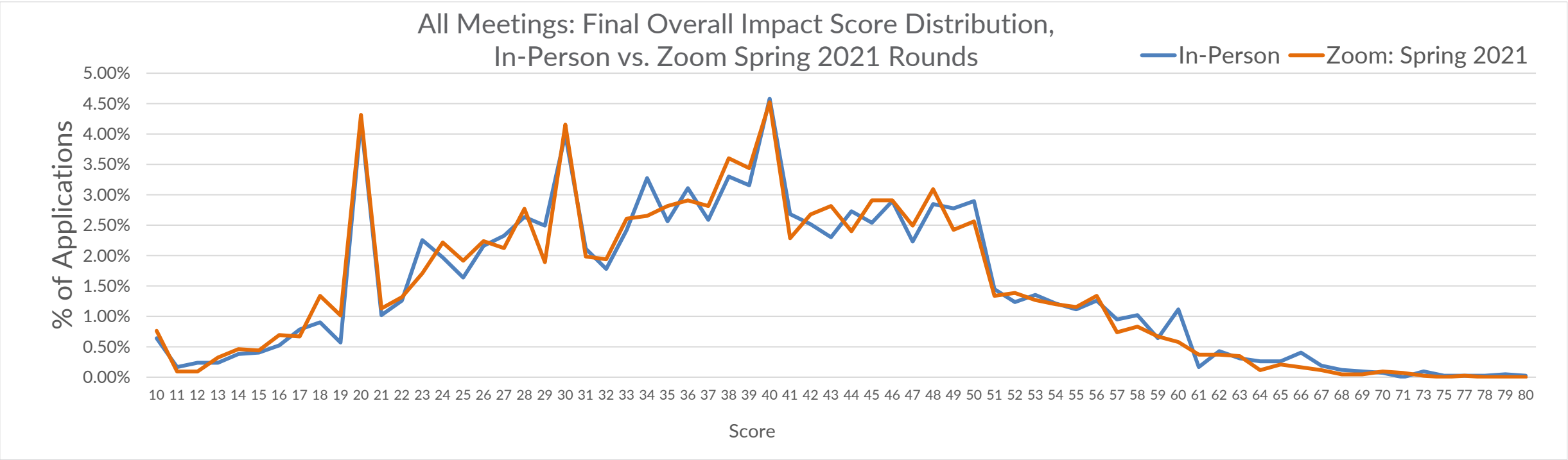


# All prefer in-person over zoom, but margin is larger for senior faculty (full profs)



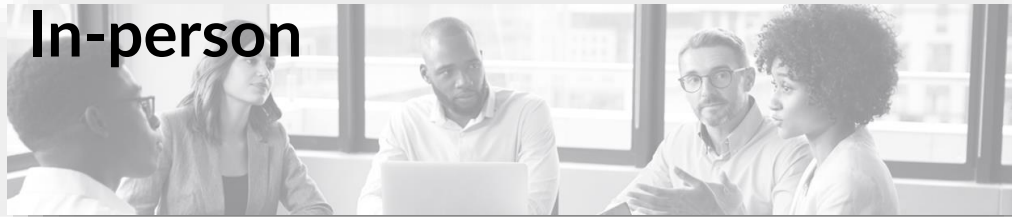
# Zoom vs In-person: No significant change in score distributions, out-of-range scoring

Meeting Type	All Meetings		Standing Study Sections		Fellowship		Small Business	
Council	In-Person	Zoom	In-Person	Zoom	In-Person	Zoom	In-Person	Zoom
N of scores	120,871	131,163	96,727	105,191	12,454	12,850	11,690	13,122
% of out-of-range scores	3.6%	3.3%	3.4%	3.2%	3.8%	2.9%	4.8%	4.3%



# Both formats (in-person, virtual) have pluses and minuses

## In-person



- Preferred by more reviewers
- Engagement in discussions
- Chance for group cohesion, esp for recurring members
- Informal networking opportunities – incentive to review

- Time spent in travel to and from meetings
- Other (childcare, clinical/teaching duties etc.) considerations may be prohibitive for some reviewers – may hurt recruitment efforts, broader participation
- Environmental & fiscal impact

## Virtual



- Preferred by some reviewers
- Time saved in travel to/from meetings – incentive to review
- Ease of participation for those with other responsibilities (childcare, clinical/teaching duties etc.)– may help broader recruitment efforts
- Low environmental/fiscal impact

- Reviewer engagement
- Reviewer attention-span
- Group cohesion suffers, esp for recurring members
- Informal networking opportunity lost - less incentive

# CSR will begin holding some in-person meetings in Fall 2022

Cannot flip switch for summer – need ~5-6 month lead time (hotel contracts, travel for thousands)

- All standing panels [chartered study sections, SBIR, Fs] will hold one in-person meeting per year, beginning with about 1/3 holding in-person meetings in Oct/Nov 2022 (Jan 2023 council). The remaining 2/3 will hold in-person meetings in Feb/Mar 2023, or June/July 2023.
- CSR will proceed with caution – plans to survey reviewer/SROs, assess recruitment success, analyze participation.
- This fall, CSR will not hold hybrid meetings (i.e. one meeting with some reviewers in-person, and some on Zoom) – due to both technological and management of inequity/participation considerations. May change in the future.

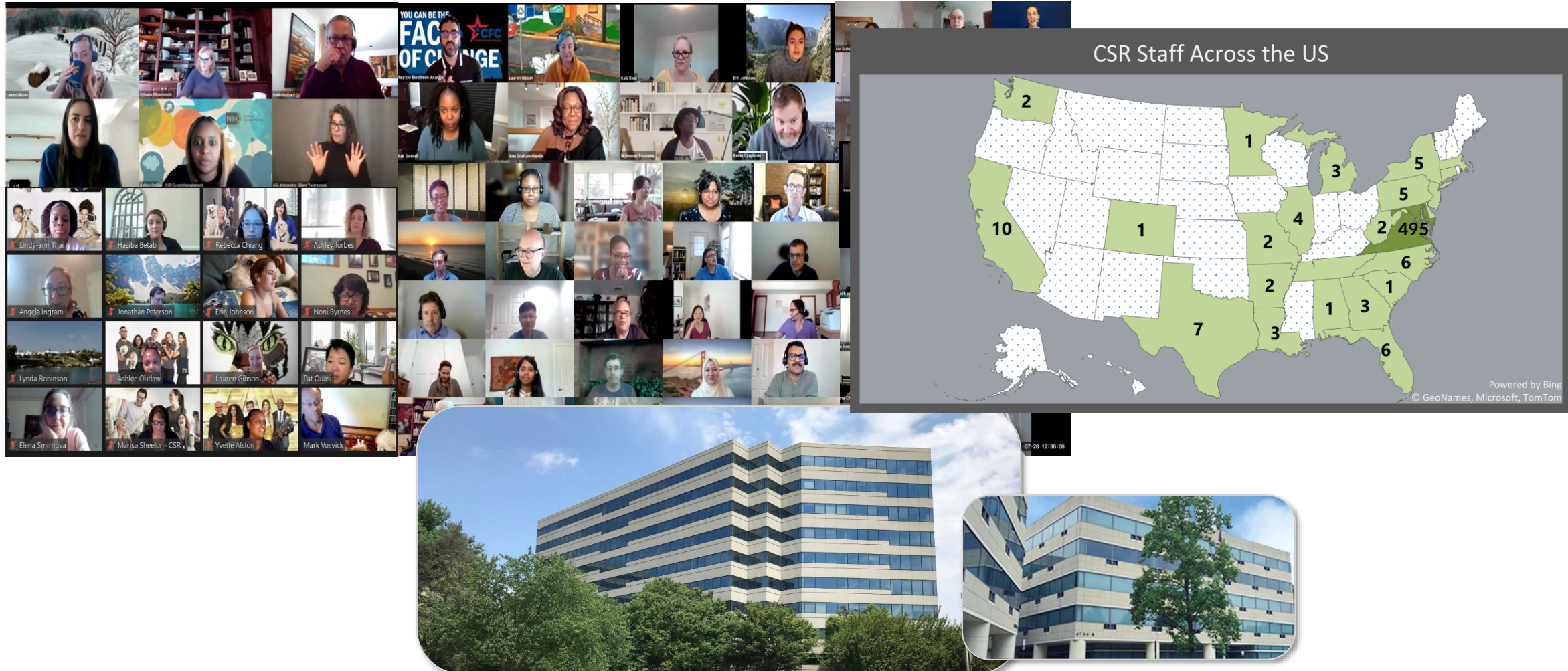


**Sept 19, 2022 meeting of CSR Advisory Council will be in-person**



# Acknowledgement

For the last two years of the pandemic, the important work of scientific peer review that underlies NIH-funded research has continued, uninterrupted, thanks to CSR's dedicated scientific, support, administrative and technical staff





## Discussion